



ATLONA
8x8 HDMI™ OVER CAT5 MATRIX SWITCHER WITH
IR CONTROL

USER'S MANUAL

MODELS: AT-HD88M-SR

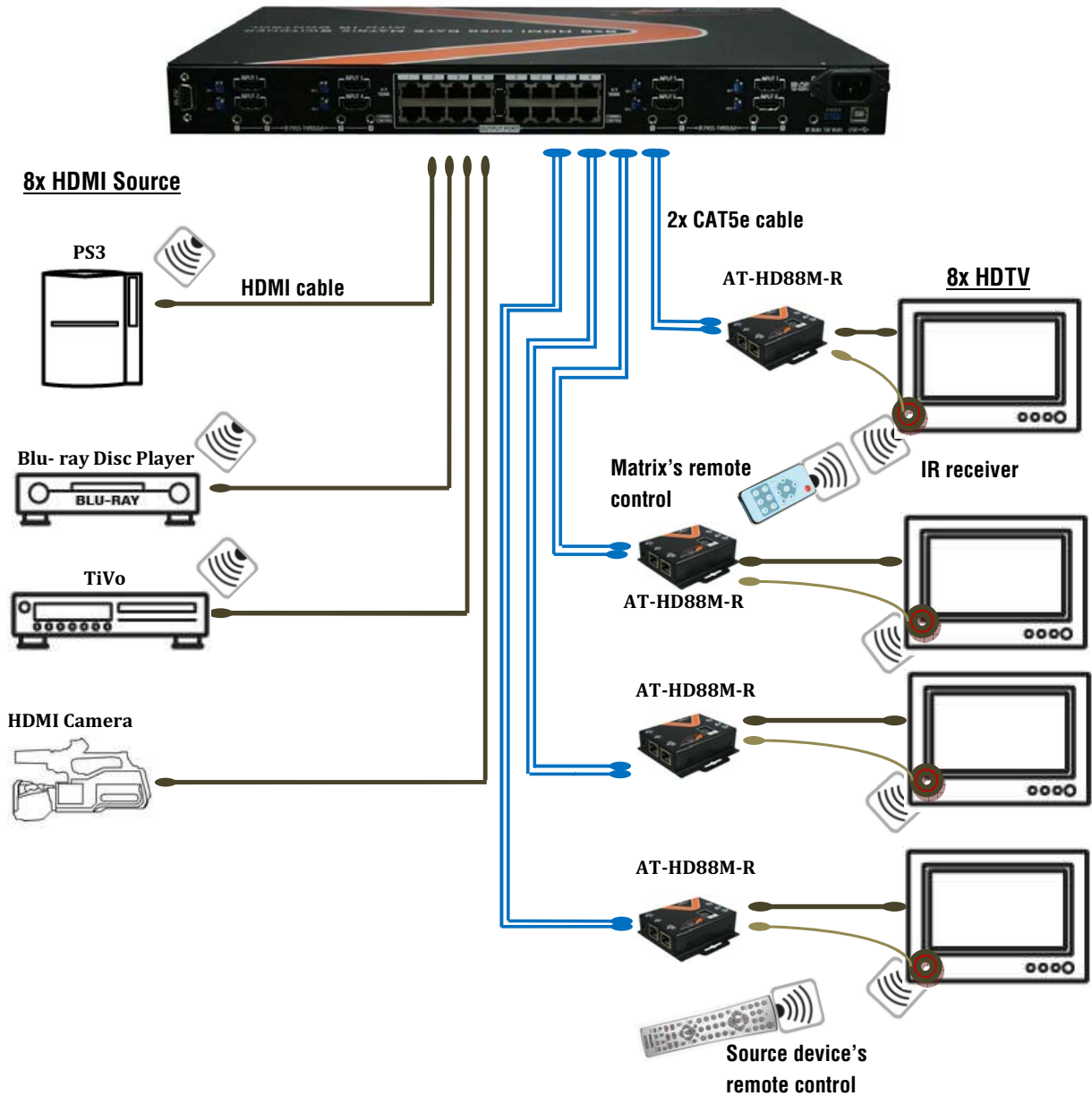


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INTRODUCTION

The AT-HD88M-SR 8x8 HDMI™ over CAT5 Matrix Switcher with IR Control provides the most flexible and cost effective solution in the market to route high definition video sources plus multi-channel (up to 7.1-channel) digital audio from any of the eight HDMI source devices to the remote displays at the same time. Through low cost Cat-5/5e/6 cables, not only high quality video and audio can be transmitted to the display sites, but also users can switch among eight HDMI sources using the push-in button or remote control. With single power design at the source site, each remote module is easily installed without power supply. Furthermore, the built-in IR extension function let users can control the HDMI source devices such as the Blu-ray Disc player or satellite receiver at display site directly!



INTRODUCTION

Features:

- ★ State-of-the-art Silicon Image (Founder of HDMI) chipset embedded for upmost compatibility and reliability
- ★ HDMI 1.3c compliant
- ★ HDCP compliant
- ★ Allows any source to be displayed on multiple displays at the same time
- ★ Allows any HDMI display to view any HDMI source at any time
- ★ Supports 7.1 channel digital audio
- ★ Supports default HDMI EDID and learns the EDID of displays
- ★ The matrix master can switch every output channels to any HDMI inputs by push-in button, IR remote control, or RS-232 control
- ★ Allows controlling local HDMI sources such as DVD and TiVo by IR extender through control path at remote receiver
- ★ Allows to control main matrix center through control line at remote receiver
- ★ Extends video signal up to 35m (115 feet) over CAT5e at 1080p and likely longer with better HDMI source device (such as PS3), and better quality solid CAT6 cable
- ★ Easy installation with rack-mounting and wall-mounting designs for master and receiver respectively
- ★ Fast response time – 2~5 seconds for channel switch

The length depends on the characteristics and quality of the cables. Higher resolutions and longer transmission distances require low skew cables (<25ns/100m) for best performance. Unshielded CAT6 with metal RJ-45 connectors is recommended.

SPECIFICATION & PACKAGE CONTENTS

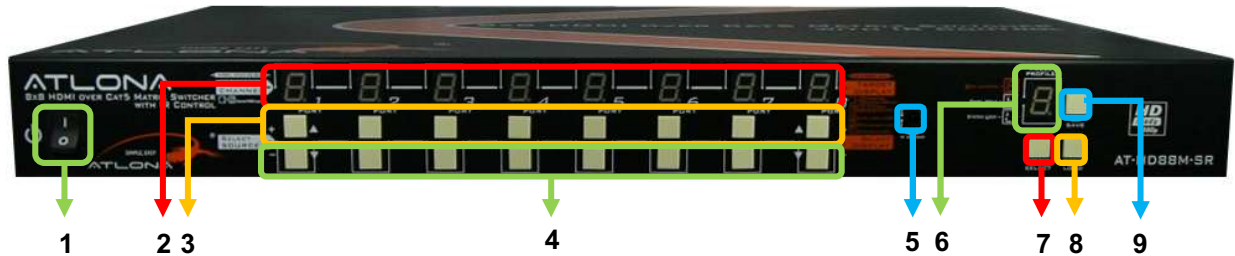
Model Name	AT-HD88M-SR	
Technical	AT-HD88M-S	AT-HD88M-R
Role of usage	8x8 true matrix / transmitter [TX]	Receiver [RX]
HDMI compliance	HDMI 1.3c	
HDCP compliance	Yes	
Video bandwidth	Single-link 225MHz [6.75Gbps]	
Video support	480i / 480p / 720p / 1080i / 1080p60	
Audio support	Surround sound (up to 7.1ch) or stereo digital audio	
HDMI over CAT5 transmission range	Full HD (1080p) – 35m (115ft) [CAT5e] / 40m (130ft) [CAT6] HD (720p/1080i) – 50m (165ft) [CAT5e] / 55m (180ft) [CAT6]	
HDMI equalization	N/A	8-level digital rotary control
Input TMDS signal	1.2 Volts [peak-to-peak]	
Input DDC signal	5 Volts [peak-to-peak, TTL]	
ESD protection	[1] Human body model — ±15kV [air-gap discharge] & ±8kV [contact discharge] [2] Core chipset — ±8kV	
Input	8x HDMI 1x RS-232 1x USB	1x RJ-45 [HDMI signal] 1x RJ-45 [Channel control] 1x IR socket for IR receiver
Output	8x RJ-45 [HDMI signal] 8x RJ-45 [Channel control] 9x IR socket for IR blaster	1x HDMI
HDMI Input selection	Push-in button / IR remote control / RS-232 / USB	Push-in button / IR remote control
HDMI source control	Controllable via IR pass-through from IR receiver at RX to IR blaster at TX	
IR remote control	Electro-optical characteristics: $\tau = 25^\circ$ / Carrier frequency: 36-40kHz	
HDMI connector	Type A [19-pin female]	
RJ-45 connector	WE/SS 8P8C with 2 LED indicators [TMDS & DDC channels]	
RS-232 connector	DE-9 [9-pin D-sub female]	
USB connector ³	Standard type-B [square shape]	
3.5mm connector	Earphone jack for IR blaster [IR Main] IR control on all source devices [IR PASS-THROUGH1~8] IR control on individual source device	Earphone jack for IR receiver [IR RECEIVER] Receives IR commands from remote control
DIP switch	[SW1~SW8] 2-pin for EDID & audio mode [SW Main] 4-pin for operation & firmware update	
Mechanical	AT-HD88M-S	AT-HD88M-R
Enclosure	Metal enclosure	
Dimensions (L x W x H)	290 x 440 x 44mm [11.4" x 1.5" x 1.7"]	90 x 85 x 25mm [3.5" x 3.3" x 1"]
Weight	Model	3250g [7.2 lbs]
	Package	180g [6.3oz]
Fixedness	1U rack-mount with ears	7.1 kg [15.6 lbs]
Power supply	AC Power 100-240V	Wall-mount with screws
Power consumption	60 Watts [max]	Not necessarily required ¹
Operation temperature	1.5 Watt [max] (provided by AT-HD88M-S)	
Storage temperature	0~40°C [32~104°F]	
Relative humidity	-20~60°C [-4~140°F]	
Package Contents	20~90% RH [no condensation]	
	1x AT-HD88M-S 1x IR blaster ¹ 2x 1U rack mounting-ear 1x IR remote control ² 1x User's Manual	8x AT-HD88M-R 8x IR receiver 16x Wall-mounting screws 1x UL AC C13 power cord 1x Installation CD

Note

1. The AT-HD88M-R has been tested extensively and found that it doesn't require external power supply. If in rare situation you find it cannot work with the AT-HD88M-S, please use any +5V power adapter to plug in the power jack and see if it can work. If not, please contact our technical support for further service.
2. Additional IR remote control and IR blaster can be purchased as optional accessories to control the HDMI sources located separately.
3. USB or RS-232 control must be connected either one at a time. Connecting both types of cables may cause command confusion.

PANEL DESCRIPTION

Front Panel of AT-HD88M-S



1. Power on/off switch
2. **PORT 1-7:** LED display to show which input source is playing on which port
3. '+' buttons: press the buttons for selecting input source in ascending sequence
4. '-' buttons: press the buttons for selecting input source in descending sequence
5. **IR SENSOR:** receiving IR commands from the IR remote
6. **PRESET PROFILES:** LED display to show preset profiles and other built-in modes
7. **SELECT:** press the button for preset profiles (1-8) and mode selection (E, L, H) in rotary order
8. **LOAD:** press the button to load selected preset profile
9. **SAVE:** press the button to save current channel mapping to selected preset profile

Mode Selection (1, 2, 3, 4, 5, 6, 7, 8, E, H, L, 1, 2,)

Mode 1-8: Preset Profiles

The matrix allows 8 sets of channel mapping configuration saved as preset profiles for later use.

Save current configuration: push the **SELECT** button to assign the preset profile (1-8) then press the **SAVE** button to save the current channel mapping configuration into this designated preset profile.

Load previously saved configuration: push the **SELECT** button to desired preset profile (1-8) then press the **LOAD** button to restore the previously saved channel mapping configuration from the designated preset profile.

Mode E: EDID Learning Mode

Please find the detail in the following section for operation in EDID Learning mode.

Mode H: Panel Hold and Unhold

Hold: push **SELECT** button until the **PRESET PROFILES** shows "H" and keep pressing the **SELECT** button for 3 seconds, then all of the buttons on the matrix front panel will be ineffective automatically.

Unhold: when the LED display of **PRESET PROFILES** shows "H", keep pressing the **SELECT** button for 3 seconds until the **PRESET PROFILES** shows "1" to unhold all of the buttons on the front panel.

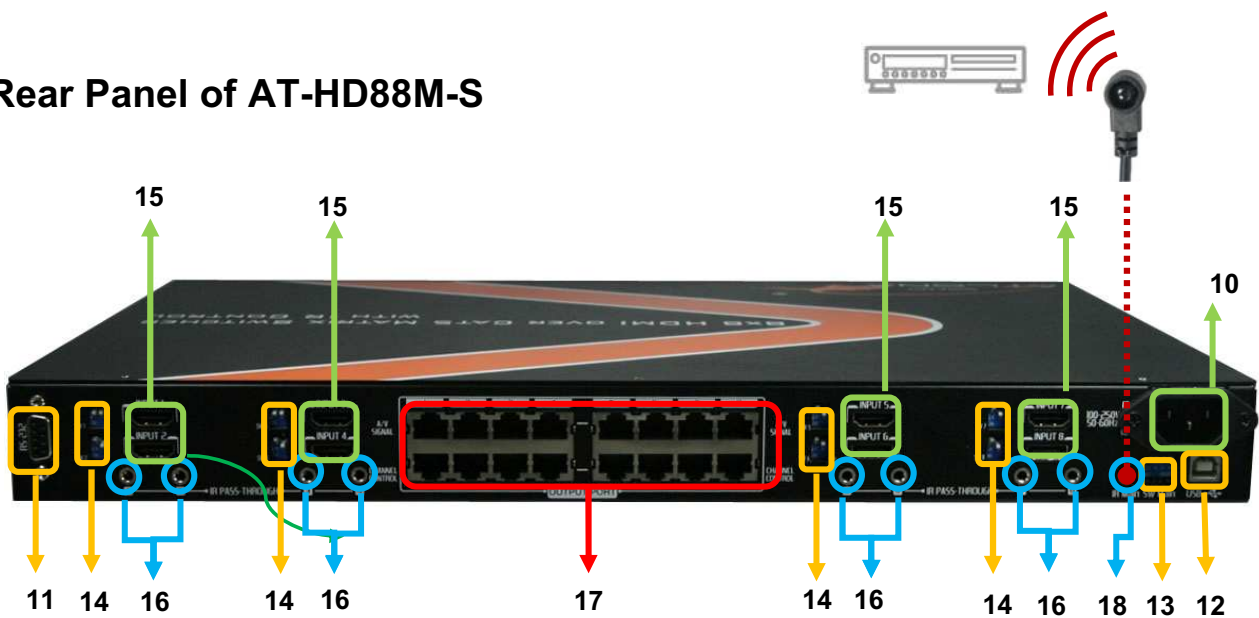
PANEL DESCRIPTION

Mode L: System Lock and Unlock

Lock: push **SELECT** button until the **PRESET PROFILES** shows “L” and keep pressing the **SELECT** button for 3 seconds, then all functions of the whole system (including the receivers, IR remote, and the commands through RS-232 or USB) will be locked automatically.

Unlock: when the LED display of **PRESET PROFILES** shows “L”, keep pressing the **SELECT** button for 3 seconds until the **PRESET PROFILES** shows “1” to unlock all system functions.

Rear Panel of AT-HD88M-S



10. AC Power: 100-250V 50-60Hz

11. **RS-232:** RS-232 control port

12. **USB:** USB control port

13. **SW Main:** 4-pin DIP switch (see DIP Switch section in p.8)

14. **SW 1 – SW 8:** 2-pin DIP switch (see DIP Switch section in p.8)

15. **INPUT 1 – INPUT 8:** HDMI inputs that connect to HDMI source devices

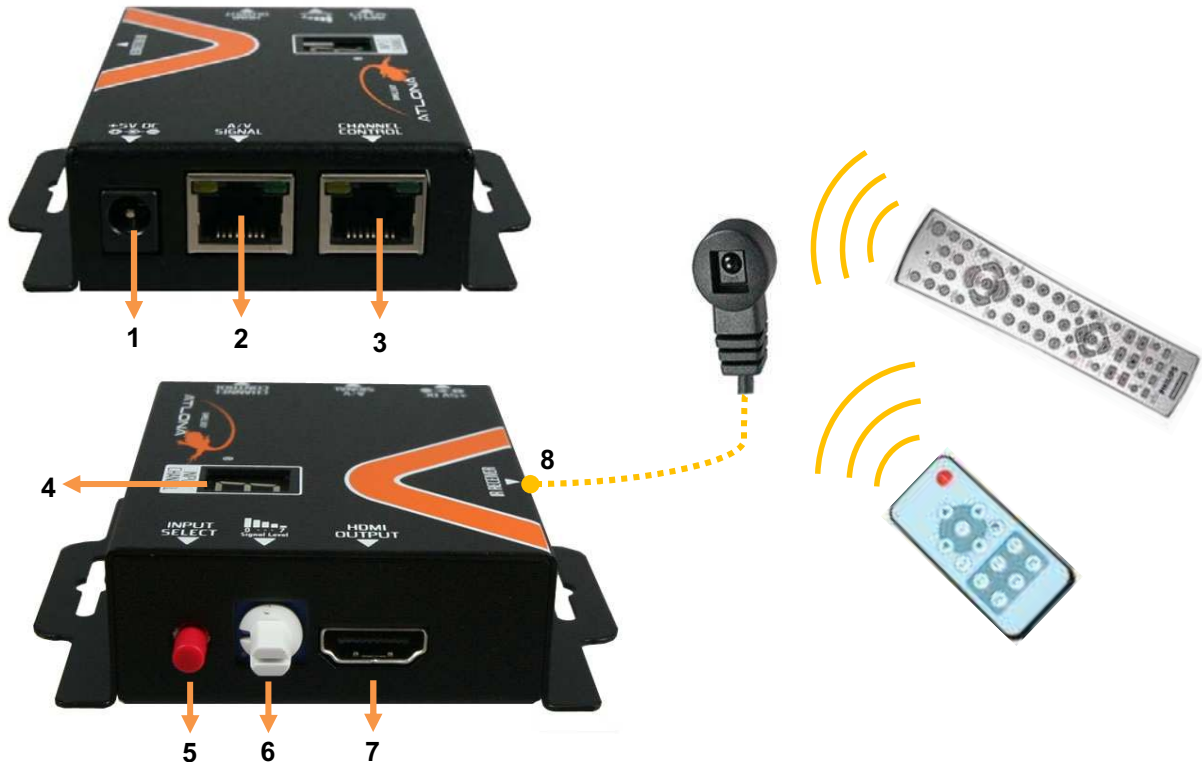
16. **IR PASS-THROUGH 1 – 8:** 3.5mm IR blaster socket for individual HDMI source control

17. **OUTPUT PORT 1 – 8:** dual RJ-45 outputs for each output channel that connect to each matrix receiver

18. **IR Main:** 3.5mm IR blaster socket for HDMI source control on all 8 inputs [default socket for IR blaster]

PANEL DESCRIPTION

AT-HD88M-R



1. **+5V DC:** spare power jack for over 60m transmission when the receiver AT-HD88M-R may need external power to work*
2. **A/V SIGNAL:** connect a solid Cat-5/5e/6 cable between the respective **A/V SIGNAL** ports on the AT-HD88M-S & AT-HD88M-R
3. **CHANNEL CONTROL:** connect a solid Cat-5/5e/6 cable between the respective **CHANNEL CONTROL** ports on the AT-HD88M-S & AT-HD88M-R
4. **INPUT CHANNEL:** LED display to show the currently selected HDMI input source
5. **INPUT SELECT:** push-in button for switching input sources in sequential order
6. **Signal Level 0-7:** adjust the 8-level equalization control to the received HDMI signals. The HDMI signal level varies from 0 (strongest) to 7 (weakest) for respective transmission length from longest possible range to short distance. It is recommended to switch from 7 to 0 to find the optimal visual experience.
7. **HDMI OUTPUT:** connect to HDTV with a HDMI cable
8. **IR RECEIVER:** plug in the IR receiver

** The AT-HD88M-R has been tested extensively and found that it doesn't require external power supply. If in rare situation you find it cannot work with the AT-HD88M-S, please use any +5V power adapter to plug in the power jack and see if it can work. If not, please contact your technical support for further service.*

DIP SWITCH

SW1-SW8 for EDID/Audio

DIP Switch Position		Video	Audio	Description
Pin#1	Pin#2			
OFF [↑]	OFF [↑]	Up to 1080p	Stereo ¹	Default Mode ² – Up to 1080p & stereo audio output for most HDTVs
OFF [↑]	ON [↓]	Up to 720p/1080i	Stereo	Safe Mode ³ – Enforce the system output at 720p/1080i video and stereo audio for basic compatibility among HDTVs
ON [↓]	OFF [↑]	Bypass ⁴	Bypass ₄	EDID Learning Mode ⁵ – for learning EDID from the display while playing any received HDMI audio format
ON [↓]	ON [↓]	Bypass	Stereo	EDID Learning & Stereo Mode ⁵ – for learning EDID from the display while enforcing stereo output if any HDTV cannot play surround sound normally



Note

¹ If the HDTV shows video but without audio, please try to set audio mode to stereo.

² Factory default setting of [SW1]-[SW8] is pin#1-OFF[↑] & pin#2- OFF[↑] for 1080p with stereo.

³ If you encounter any unsolved audio/video output problem during system installation, please turn any [SW1]-[SW8] to pin#1-OFF[↑] & pin#2-ON[↓] for safe mode to enforce the most compatible 720p stereo output for system check. However, the safe mode cannot be initiated if your HDMI source is set to enforce 1080p output. In this case, please reconfigure your HDMI source to all resolution output for troubleshooting.

⁴ Bypass means the matrix will maintain playing the original format of HDMI signals in video and perhaps audio. By setting at this mode, the users may encounter compatibility issue among different kinds of HDMI sources and displays. If you cannot get the audio and/or video output normally at the system installation, please change the DIP switch setting to default mode or even safe mode to verify the functionality of the device.

⁵ To learn the EDID of HDMI display for respective HDMI source devices, please see the [EDID Learning] section in the next page for more detail information.

DIP SWITCH

SW Main for firmware update (for technical support only)

DIP Switch Position		Pin#1	Pin#2	Pin#3	Pin#4
Normal Operation Mode [via RS-232 port] ⁶		OFF[↑]	OFF[↑]	OFF[↑]	OFF[↑]
Normal Operation Mode [via USB port] ⁷		OFF[↑]	OFF[↑]	OFF[↑]	ON[↓]
Firmware Update Mode ⁸	Block A [main]	ON[↓]	OFF[↑]	OFF[↑]	OFF[↑]
	Block B [remote]	ON[↓]	OFF[↑]	ON[↓]	OFF[↑]
	Block C [HDMI]	ON[↓]	ON[↓]	OFF[↑]	OFF[↑]



Note

⁶ Factory default for SW Main is pin#1-OFF[↑], pin#2-OFF[↑], pin#3- OFF[↑], & pin#4-OFF[↑]. PLEASE MAINTAIN THIS SETTING AT ANYTIME FOR REGULAR USE VIA RS-232 CONTROL!

⁷ Factory default for SW Main is pin#1-OFF[↑], pin#2-OFF[↑], pin#3- OFF[↑], & pin#4- ON[↓]. PLEASE MAINTAIN THIS SETTING AT ANYTIME FOR REGULAR USE VIA USB CONTROL!

⁸ Sequence for firmware update

WARNING! [Firmware update only can be done via RS-232 port and connection to PC set at COM1]

1. Power off the AT-HD88M-S. Execute the firmware update program on your PC via COM1 port connection to the RS-232 port of the AT-HD88M-S.
2. Set the pin#1 of [SW Main] at ON[↓] for firmware update mode.
3. Set pin#2 and pin#3 at respective positions to assign which Block to be updated.
4. Power on the AT-HD88M-S. The firmware update program should begin this update sequence automatically. If not, please check the RS-232 connection status between PC and AT-HD88M-S.
5. After the OK message shows up to indicate the firmware update sequence for designated Block is complete, please turn off the AT-HD88M-S.
6. Repeat step 3 ~ step6 if you want to update the firmware of the remaining Blocks.
7. Set the [SW Main] switch position to Normal Operation Mode.
8. Power on the AT-HD88M-S.

IR PASS-THROUGH

IR Extenders

IR Blaster



IR Receiver



IR Sockets

AT-HD88M-S

IR Main: The default location for IR blaster to transmit all IR command signals received from any of the eight remote receivers to all of the HDMI sources.

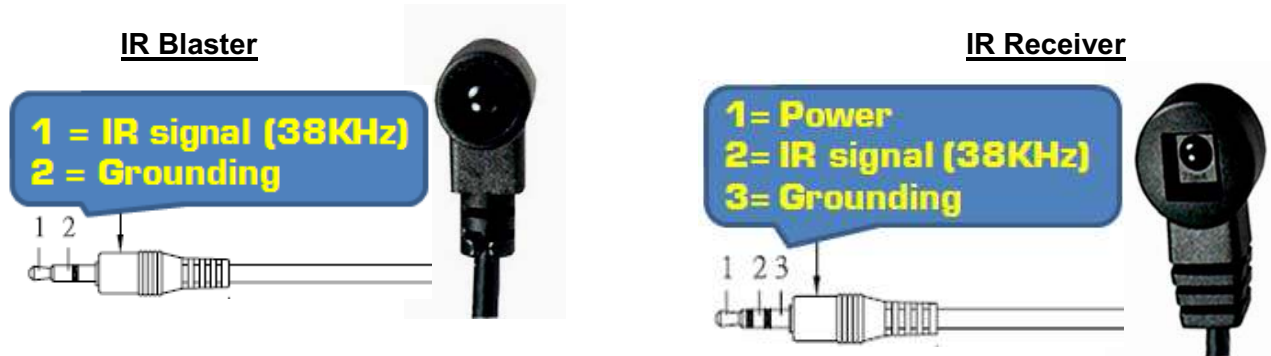
IR PASS-THROUGH 1–8: IR blaster connected here can only transmit IR command signals from the remote receivers that are setting at respective input channel from 1 to 8.

AT-HD88M-R

IR RECEIVER: IR receiver connected here can receive all IR command signals from the IR remote controls of AT-HD88M-SR and all other HDMI source devices.

IR PASS-THROUGH

Definition of IR Earphone Jack



You can buy any IR extension cables in the market that are compatible to the definition of the IR sockets for the matrix if necessary for replacement use.

Supported IR Data Format

Data Format	Suitable	Not Recommended
NEC	<input checked="" type="checkbox"/>	
RC5	<input checked="" type="checkbox"/>	
TOSHIBA MICOM CODE	<input checked="" type="checkbox"/>	
GRUNDIG CODE	<input checked="" type="checkbox"/>	
SONY 12 BIT CODE	<input checked="" type="checkbox"/>	
SONY 15 BIT CODE	<input checked="" type="checkbox"/>	
SONY 20 BIT CODE	<input checked="" type="checkbox"/>	
RCA CODE		<input checked="" type="checkbox"/>
RCM CODE		<input checked="" type="checkbox"/>
MATSUSHITA CODE		<input checked="" type="checkbox"/>
MITSUBISHI CODE	<input checked="" type="checkbox"/>	
ZENITH CODE	<input checked="" type="checkbox"/>	
JVC CODE	<input checked="" type="checkbox"/>	
M50560-001P	<input checked="" type="checkbox"/>	
MN6125H	<input checked="" type="checkbox"/>	
MN6125L	<input checked="" type="checkbox"/>	
MN6014_C5D7	<input checked="" type="checkbox"/>	
MN6014-C6D6	<input checked="" type="checkbox"/>	
MC14457P	<input checked="" type="checkbox"/>	
LC7464(AHEA)	<input checked="" type="checkbox"/>	
GEMINI_CM	<input checked="" type="checkbox"/>	

HARDWARE INSTALLATION

AT-HD88M-S as master unit

1. Connect all sources to HDMI Inputs on the 8x8 HDMI over CAT5 matrix master AT-HD88M-S
2. Connect each **CHANNEL CONTROL** output port on the AT-HD88M-S to respective **CHANNEL CONTROL** port on the remote receiver AT-HD88M-R
3. Connect each **A/V SIGNAL** output port on the AT-HD88M-S to respective **A/V SIGNAL** input on the remote receiver AT-HD88M-R
4. Connect IR blaster to the **IR MAIN** jack of AT-HD88M-S and direct the IR blaster to the built-in IR receiver of the sources
5. Connect the UL AC C13 power cord to the AT-HD88M-S
6. Power on all HDMI sources
7. Power on the AT-HD88M-S

AT-HD88M-R as receiver unit

1. Connect each HDMI output to HDMI displays
2. Connect the **A/V SIGNAL** port on the AT-HD88M-R to the **A/V SIGNAL** port on the AT-HD88M-S
3. Connect the **CHANNEL CONTROL** port on the AT-HD88M-R to the **CHANNEL CONTROL** port on the AT-HD88M-S
4. Connect IR receiver and place the IR receiver at the appropriate position that can receive the IR command signals sent from the users
5. Dial the 8-level rotary control switch to adjust the HDMI signal level until the picture and sound are clear

PERFORMANCE GUIDE

Performance rating		Type of LAN cable		
Wiring	Shielding	CAT5	CAT5e	CAT6
Solid	Unshielded (UTP)	★★★	★★★★	★★★★★
	Shielded (STP)	★★★	★★★	★★★★★
Stranded	Unshielded (UTP)	★	★★	★★
	Shielded (STP)	★	★	★★
Termination		Please use EIA/TIA-568-B termination (T568B) at any time		

CHANNEL CONTROL

Source Side

Method A: Push-in Button

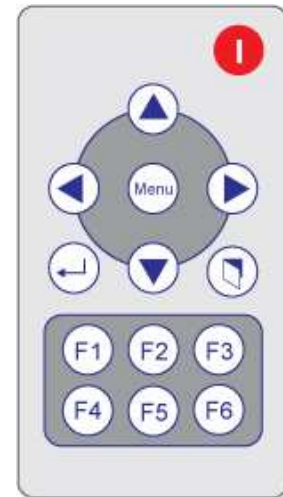
1. Use the up/down button to select which input is chosen upon the output
(▲) increase (▼) decrease

Method B: IR Remote Control

- a. Please press F1 to F6, Enter (↵), and Exit (⏏) button to enter IR control mode and decide which output port to be controlled (see the table below). Or you can use up (▲) and down (▼) button to enter IR control mode and select the output port in ascending and descending order respectively. Whenever you press an IR key to the matrix, the LED display of Port 1 will have a little dot on the lower-right corner lights up to indicate that the matrix receives the IR command.

Note

F1	HDMI output port #1
F2	HDMI output port #2
F3	HDMI output port #3
F4	HDMI output port #4
F5	HDMI output port #5
F6	HDMI output port #6
Enter (↵)	HDMI output port #7
Exit (⏏)	HDMI output port #8
Up (▲)	Switch output port in ascending order
Down (▼)	Switch output port in descending order



- b. Use left (◀) or right (▶) button to select input source as indicated by the LED display on the front panel for the input channel. The setting will be active once the channel switch command is set after a couple seconds.

Note

- Right (▶) button to switch input source in ascending order (1, 2, 3, 4, 5, 6, 7, 8, 1, ...)
- Left (◀) button to switch input source in descending order (1, 8, 7, 6, 5, 4, 3, 2, 1, ...)

CHANNEL CONTROL

Display Side

Method A: Push-in button for switching input channels

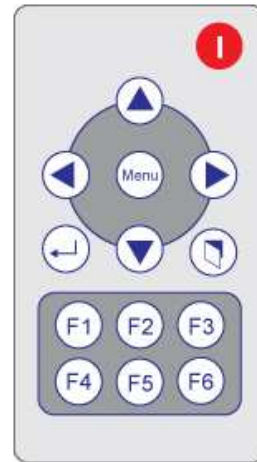
Press the **INPUT SELECT** push-in button to switch the input source on the respective output port connected to the matrix receiver in sequential order. The selected input source will be displayed on the LED of **INPUT CHANNEL**.

Method B1: IR remote control for switching input channels

Please press F1 to F6, Enter (↵), and Exit (⏏) button to enter IR control mode and decide which input channel to be selected by pressing F1 to F6, Enter (↵), and Exit (⏏) button, and wait a few seconds for the input channel LED display to show the number of selected input source channel. Or you can use up (▲) and down (▼) button to enter IR control mode and select the input channel in ascending and descending order respectively.

Note

F1	HDMI input source #1
F2	HDMI input source #2
F3	HDMI input source #3
F4	HDMI input source #4
F5	HDMI input source #5
F6	HDMI input source #6
Enter (↵)	HDMI input source #7
Exit (⏏)	HDMI input source #8
Up (▲)	Switch source in ascending order
Down (▼)	Switch source in descending order



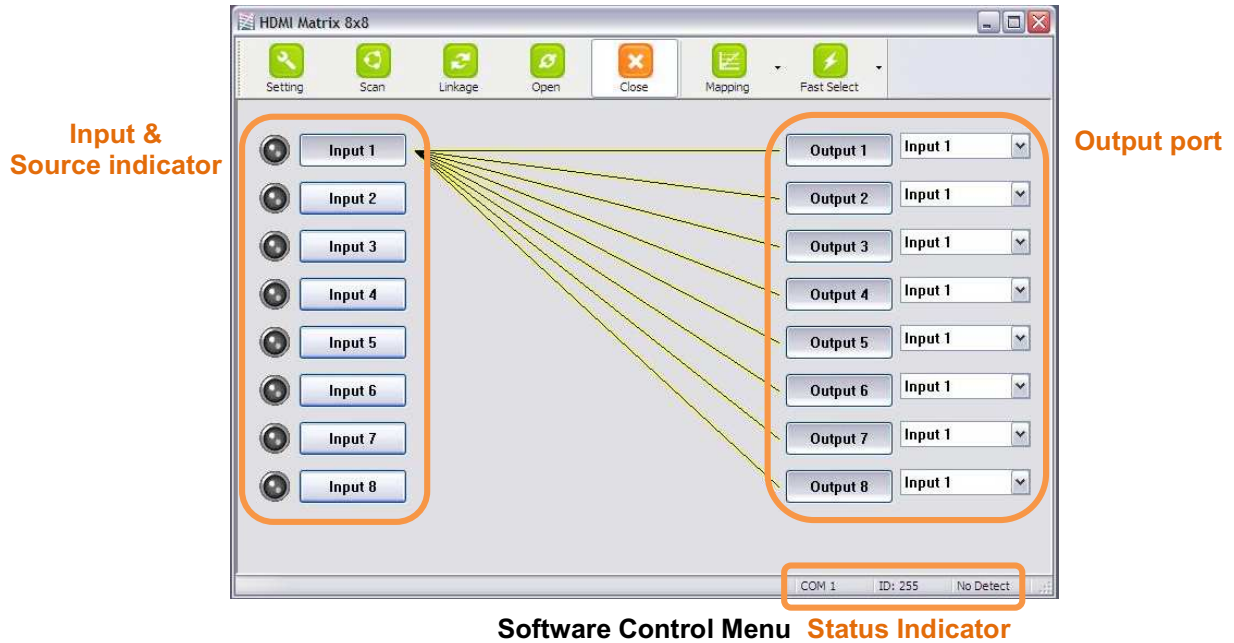
➔ ***If AT-HD88M-R receives the IR command, the LED will flash. If not, try it again.***

Method B2: IR remote control for controlling the HDMI sources

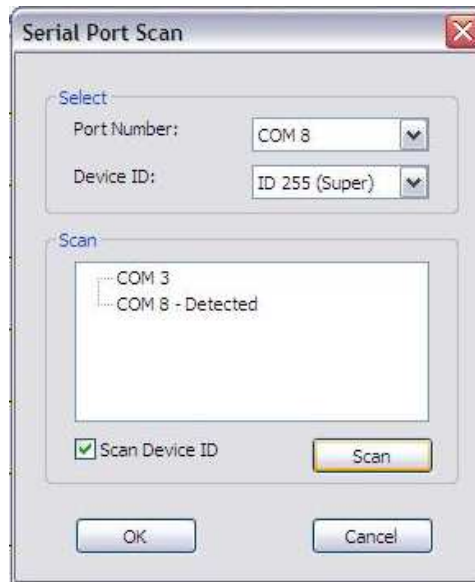
Users can use the corresponding IR remote to control respective Blu-ray Disc player or any HDMI compliant devices including AT-HD88M-SR itself with IR control at any display site.

CHANNEL CONTROL

Method C: Software Control through RS-232 serial port



1. Scan button:



Serial Port Scan:

- Press **Scan** button, the machine will scan the all com port and show them.
- Select the RS-232 serial port connected to the machine. And set device ID 255 is for all device.
- Only the same device ID or 255 can get the command you sent.
- Press **OK** to get the new status from the machine you select.

CHANNEL CONTROL

2. Setting button:

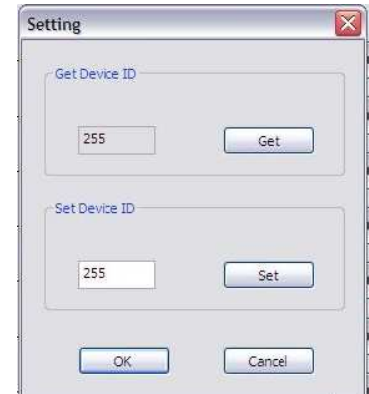
Press **Get** button to read back device ID.
Press **Set** button to write device ID.

3. Linkage button:

Press **Linkage** button to read back all status.

4. Open/Close button:

Press this button to close or open COM port.



5. Mapping button:

Select All Output:

Select "set all output", then select the source on main menu . You can quickly set all output to the same source.

Unselect All Output:

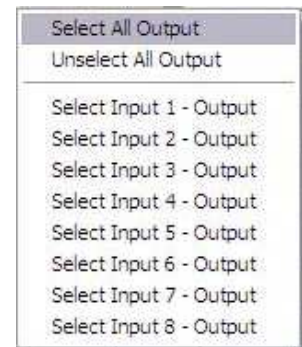
Release output selection.

Select Input1~8-Output:

Select Input Source. Then select the output port icon.

For example:

Select input source 1. Then select output port one and two. The video and audio will be send to port one and two.



6. Fast Select button:

Press **Fast select** button. Quick setting.

Input one ➡ Output Port one

Input two ➡ Output Port two

.....

Press Fast select pull down menu.

Select Input Num-Output Num

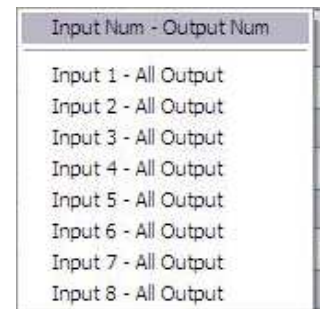
Input source #1 ➡ Output port #1

Input source #2 ➡ Output port #2

.....

Select Input* - All Output

Send the same source to all output.



CHANNEL CONTROL

7. Output Port:

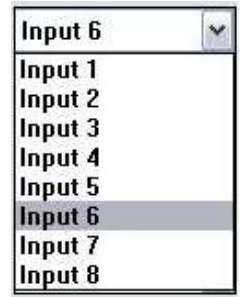
Pull down menu and select which source to be sent to this output port.

One by one setting

On main menu screen.

First select input source. Then select the output ports which you want to send the video and audio from this source. When you select the input source, the source will change to gray. When you select the output port one by one, the selected output port will change to gray.

The linking line will change to yellow.



Group setting

First select output ports one by one. Then select the input source. The selected output ports change the setting at the same time.

By using Terminal:

Baud rate: 9600
 Data length: 8bit
 Parity check: No
 Stop bit: 1

Command Set:

COMMAND	ACTION	COMMAND	ACTION	COMMAND	ACTION
ST	System Status*	C5	Output C select Input5	F3	Output F select Input3
VR	Firmware Version	C6	Output C select Input6	F4	Output F select Input4
A1	Output A select Input1	C7	Output C select Input7	F5	Output F select Input5
A2	Output A select Input2	C8	Output C select Input8	F6	Output F select Input6
A3	Output A select Input3	D1	Output D select Input1	F7	Output F select Input7
A4	Output A select Input4	D2	Output D select Input2	F8	Output F select Input8
A5	Output A select Input5	D3	Output D select Input3	G1	Output G select Input1
A6	Output A select Input6	D4	Output D select Input4	G2	Output G select Input2
A7	Output A select Input7	D5	Output D select Input5	G3	Output G select Input3
A8	Output A select Input8	D6	Output D select Input6	G4	Output G select Input4
B1	Output B select Input1	D7	Output D select Input7	G5	Output G select Input5
B2	Output B select Input2	D8	Output D select Input8	G6	Output G select Input6
B3	Output B select Input3	E1	Output E select Input1	G7	Output G select Input7
B4	Output B select Input4	E2	Output E select Input2	G8	Output G select Input8
B5	Output B select Input5	E3	Output E select Input3	H1	Output H select Input1
B6	Output B select Input6	E4	Output E select Input4	H2	Output H select Input2
B7	Output B select Input7	E5	Output E select Input5	H3	Output H select Input3
B8	Output B select Input8	E6	Output E select Input6	H4	Output H select Input4
C1	Output C select Input1	E7	Output E select Input7	H5	Output H select Input5
C2	Output C select Input2	E8	Output E select Input8	H6	Output H select Input6
C3	Output C select Input3	F1	Output F select Input1	H7	Output H select Input7
C4	Output C select Input4	F2	Output F select Input2	H8	Output H select Input8

EDID LEARNING

EDID learning is needed whenever the user has certain HDMI displays that cannot output audio/video properly. This could happen when the HDMI displays connected to the matrix have different capability output HDMI signals. If that happens, please enter the EDID learning mode and make all input ports learn the EDID from the display with lowest capability for HDMI signals.



Note

SW1-SW8 Pin-1 must be set "ON" for EDID Learning Mode

DIP Switch Position	Video	Audio	Description
Pin-1			
ON [↓]	Bypass	Stereo	EDID Learning – for learning EDID from the receiver

Method A: Manually connect HDMI display to HDMI INPUT

Please see the section “**DIP Switch**”

Method B: Using Front Panel

1. Push the **SELECT** button until the LED display of PRESET PROFILES shows “**E**” to enter the EDID Learning Mode.
2. Press Up (+) button or Down (–) button to choose which output display's EDID will be learned by each input port, and the number of the chosen output display will be shown on the LED display.
3. Each input port of the matrix can learn the same or differently chosen display's EDID at the same time.
4. The LED display on each port will show “**H**” if the user decide the input port to keep the currently stored EDID.
5. After the EDID learning configuration is finished, press **SAVE** button to proceed EDID learning sequence on all HDMI input ports.
6. Each LED of the input port will show “**O**” (OK) if the operation is successful or “**F**” (Failed) if not successful. Please repeat the procedure from step 1 if any port shows “**F**”.

IR DIRECT CODE

Custom Code 01 EE (14-key IR remote) (default: 01 EE)

Receiver Unit		Master Unit (0x01 0xEE)	
Source 1	0x1E	Output Port 1 (F1)	0x1E
Source 2	0x1B	Output Port 2 (F2)	0x1B
Source 3	0x1F	Output Port 3 (F3)	0x1F
Source 4	0x06	Output Port 4 (F4)	0x06
Source 5	0x0C	Output Port 5 (F5)	0x0C
Source 6	0x13	Output Port 6 (F6)	0x13
Source 7	0x1C	Output Port 7 (ENTER)	0x1C
Source 8	0x18	Output Port 8 (EXIT)	0x18
Source +	0x19	Source + (RIGHT)	0x19
Source -	0x05	Source - (LEFT)	0x05
		OUTPORT + (UPPER)	0x16
		OUTPORT - (DOWN)	0x0D

Custom Code: IR3 0x12 0x21

Custom Code: 0x12 0x21								
	Output Port 1	Output Port 2	Output Port 3	Output Port 4	Output Port 5	Output Port 6	Output Port 7	Output Port 8
Source 1	0xA1	0xB1	0xC1	0xD1	0xE1	0xF1	0x11	0x21
Source 2	0xA2	0xB2	0xC2	0xD2	0xE2	0xF2	0x12	0x22
Source 3	0xA3	0xB3	0xC3	0xD3	0xE3	0xF3	0x13	0x23
Source 4	0xA4	0xB4	0xC4	0xD4	0xE4	0xF4	0x14	0x24
Source 5	0xA5	0xB5	0xC5	0xD5	0xE5	0xF5	0x15	0x25
Source 6	0xA6	0xB6	0xC6	0xD6	0xE6	0xF6	0x16	0x26
Source 7	0xA7	0xB7	0xC7	0xD7	0xE7	0xF7	0x17	0x27
Source 8	0xA8	0xB8	0xC8	0xD8	0xE8	0xF8	0x18	0x28

IR DIRECT CODE

Custom Code: IR4 0x13 0x31

Custom Code: 0x13 0x31								
	Output Port 1	Output Port 2	Output Port 3	Output Port 4	Output Port 5	Output Port 6	Output Port 7	Output Port 8
Source 1	0xAE	0xBE	0xCE	0xDE	0xEE	0xFE	0x1E	0x2E
Source 2	0xAD	0xBD	0xCD	0xDD	0xED	0xFD	0x1D	0x2D
Source 3	0xAC	0xBC	0xCC	0xDC	0xEC	0xFC	0x1C	0x2C
Source 4	0xAB	0xBB	0xCB	0xDB	0xEB	0xFB	0x1B	0x2B
Source 5	0xAA	0xBA	0xCA	0xDA	0xEA	0xFA	0x1A	0x2A
Source 6	0xA9	0xB9	0xC9	0xD9	0xE9	0xF9	0x19	0x29
Source 7	0xA8	0xB8	0xC8	0xD8	0xE8	0xF8	0x18	0x28
Source 8	0xA7	0xB7	0xC7	0xD7	0xE7	0xF7	0x17	0x27

Note Using terminal to set Custom Code

Example: Set custom code from 0x01 0xEE to 0x13 0x31

>>IR4 ----- command (using RS-232 terminal command mode)

>>IR4 ----- echo

Command	Custom Code
IR1	0x01 0xEE
IR3	0x12 0x21
IR4	0x13 0x31

SAFETY INFORMATION

Safeguards

To reduce the risk of electric shock, do not expose this product to rain or moisture.

If the wall plug does not fit into your local power socket, hire an electrician to replace your obsolete socket.

Do not modify the wall plug. Doing so will void the warranty and safety features.

This equipment should be installed near the socket outlet and the device should be easily accessible in case it requires disconnection.

Precautions

FCC Regulations state that any unauthorized changes or modifications to this equipment not expressly approved by the manufacturer could void the user's authority to operate this equipment.

Operate this product using only the included external power supply. Use of other power supplies could impair performance, damage the product or cause fires.

In the event of an electrostatic discharge, this device may automatically turn off. If this occurs, unplug the device, and plug it back in.

Protect and route power cords so they will not be stepped on or pinched by anything placed on or against them. Be especially careful of plug-ins, or cord exit points from this product.

Avoid excessive humidity, sudden temperature changes or temperature extremes.

Keep this product away from wet locations such as bathtubs, sinks, laundries, wet basements and swimming pools.

Use only accessories recommended by ATLONA to avoid fire, shock or other hazards.

Unplug the product before cleaning. Use a damp cloth for cleaning. Do not use cleaning fluid or aerosols, which could enter the unit and cause damage, fire or electrical shock. Some substances may also mar the finish of the product.

Never open or remove unit panels or make any adjustments not described in this manual. Attempting to do so could expose you to dangerous electrical shock or other hazards. It may also cause damage to your AT-HD88M-SR. Opening the product will void the warranty.

Do not attempt to service the unit. Instead disconnect it and contact your Authorized ATLONA reseller or contact ATLONA directly.

WARRANTY

This Limited Warranty (the "Warranty") is made and effective January 2009

1. LIMITED WARRANTY

Atlona Technologies warrants that (a) its products (the "Product") will perform substantially in accordance with the accompanying written materials for a period of 3 years from the date of receipt and (b) that the Product will be free from defects in materials and workmanship under normal use and service for a period of 3 years. In the event applicable law imposes any implied warranties, the implied warranty period is limited to 3 years from the date of receipt. Some jurisdictions do not allow such limitations on duration of an implied warranty, so the above limitation may not apply to Customer.

2. CUSTOMER REMEDIES

Atlona Technologies and its suppliers' entire liability and Customer's exclusive remedy shall be, at Atlona Technologies' option, either return of the price paid for the Product, or repair or replacement of the Product that does not meet this Limited Warranty and which is returned to Atlona Technologies with a copy of Customer's receipt. This Limited Warranty is void if failure of the Product has resulted from accident, abuse, or misapplication. Any replacement Product will be warranted for the remainder of the original warranty period or 3 year, whichever is longer.

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